



**Academic Year 2019-20 (ODD Semester)**  
**(March 2019 to October 2019)**

**1. Faculty Contributions**

- **Courses Attended by faculty**
  - Workshop / Short Term Training Program
  - Orientation Program
  
- **Workshops/Courses Conducted by faculty**
  
- **Skill Enhancement activity**
  - NPTEL Certification
  
- **Research Forum Activities**
  - Expert Talks
  - Minor Research Grant Proposals
  - Research Papers Published

**2. Student Portfolio**

- **Student Achievements**



- **Student Participation**

- Summer School
- Finishing school
- Workshops/Seminars
- Entrepreneurship / R&D Project
- Internship

## Instrumentation Department



<b>FACULTY CONTRIBUTION</b>
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- Courses Conducted by Faculties
- Workshop/Courses Conducted by Faculties

Sr. No.	Conducted by	Course Description	Organized by	Date	Number of days
1	Nilima Warke, Kanchan Chavan, Kadambari Sharma, Prasad Godse, Amudha Senthilkumar	L&T GET	VESIT	18/07/19 to 17/09/19	16 Days

- Courses Attended by Faculty

Sr. No.	Attended By	Course description	Organized by	Date	Number of days
1	Kadar Shaikh	One day w/s on Research Methodology	BNCoE Pusad	21/09/19	One Day
2	Jayasree R	Progressive web APP Development & Blockchain	VESIT	01/07/19 – 06/07/19	One Week
3	Namrata Bonde	Progressive web APP Development & Blockchain	VESIT	21/09/19 – 01/07/19	11 Days
4	Nilima Warke	Emerging trends in operations research	VESIT	24/06/19 - 29/06/19	One Week
5	Kanchan Chavan	Beneficial effects of Radiation developed by IARP & Indian Nuclear Energy Program	VES	March 2019	One Day
6	Sangeetha Prasanna Ram	Introduction to Machine Learning and Deep Learning - with applications to Engineering Systems	IIT B	13/05/19 – 17/05/19	One week
7	Sangeetha Prasanna Ram	Deep Learning - From Basics to Practice	IIT B	18/06/19 – 22/06/19	One week

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- NPTEL Certifications

Sr. No.	Name of the Faculty	NPTEL Course Description	Organized by	Period	Score
1	Jayasree R	Introduction to Internet of Things	IIT Kharagpur	Jan – Apr 2019 12-week Course	98% Elite + Gold

**Research Forum Activities**

- Expert Talks

Sr. No.	Date	Name of the Expert	Designation & Organisation	Topic	Attended By
1	12/03/19	Lekshmi Nair	SRF VESIT	Emulation of Partial Discharge	Faculty
2	25/09/19	Birajadar P	Asst Prof. VESIT	LATEX	Faculty & Students

- Minor Research Grant Proposals

	Name of Faculty	Title of Project	Domain	Sanctioned Amount
1	Mrs. Nilima Warke	Design and Construction of a Computer Controlled High Resolution Research Grade Validation System for Hardware Research	Electronics	20000
2	Mrs. Kanchan Chavan	Time to Digital Converter for Nuclear Timing Spectroscopy System	Nuclear Instrumentation	20000

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• Research Paper Published

Publication - Author List	Publication - Affiliation of Authors	Publication - Date	Publication - National / International	Publication - Journal / Conference	Publication - Name of The Journal / Conference	Publication - Organised By	Publication - Venue	Publication - Publisher	Publication - ISBN Number
Deepti Khimani, Machhindranath Patil, Bijnan Bandyopadhyay, Abhisek K Behera			International	Journal	Asian Journal of Control, 2019.				ISSN:1598-6446 eISSN:2005-4092
Asif Chalanga, Machhindranath Patil, Bijnan Bandyopadhyay, Hemendra Arya			International	Journal	European Journal of Control, Volume 45, Elsevier, 2019				
Mrs. Kanchan Chavan, Dr. P. P. Vaidya, Dr. J. M. Nair			International	Conference	IEEE Sponsored 5th International Conference for Convergence in Technology (I2CT) Pune, 2019	Yet to be published	Pune		
Amudha Senthilkumar, Mr. Gopalakrishnan, Dr. P. P. Vaidya			International	International	IEEE Sponsored 5th International Conference for Convergence in Technology (I2CT) Pune, 2019	Yet to be published			
Jayassre Ramakrishnan,			International		International Meeting on Energy Storage Devices	Yet to be published			

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N. Gopalkrishnan, Dr. P. P. Vaidya, Dr. J. M. Nair					(IMESD)- 2018, IIT Roorkee December 10-12 2018				
Kunal Raut, Kanchan Chavan			Internati onal		International Journal of Advanced Research in Electrical, Electronics and Instrumentati on Engineering (IJAREEIE), Vol. 7, Issue 10, October 2018				ISSN (Print) : 2320 – 3765 ISSN (Online) : 2278 – 8875
Dipesh Solanki, Sangeetha Prasanna Ram, Dr. Mrs. J. M. Nair			Internati onal		Fourth International Conference on Computing Communicati on Control and Automation (ICCUBEA), 2018	Pimpri Chinch wad College of Engine ering	Pune		978-1- 5386- 5257-2
Mrs. Nilima Warke, Dr. P. P. Vaidya, Dr. J. M. Nair			Internati onal		International Journal of Research in Electronics and computer Engineering (IJRECE), Volume 6, Issue 4, (OCT- DEC 2018), ISSN: 2393-9028 (PRINT)  ISSN: 2348- 2281 (ONLINE)				IJRECE Vol. 6 Issue 4 (Oct- Dec 2018) ISSN: 2393- 9028 (print)  ISSN: 2348- 2281 (online)

## Instrumentation Department



- Other Achievements

- Patent

Academic Year	Type of User	Patent - Application No	Patent - Application Date	Patent - Name	Patent - Inventor Name	Patent - Description	Patent - (Co-Inventor) If Any	Patent - Status
2018-2019		201921025601	27/6/19	Robust Fluid dispensing system	Mrs. Deepti Khimani, Mr. Rakesh Kumar Barai, Dr. Machhindranath Patil			Published
2018-2019		201921035606	May 2019	Integrated High Resolution Timing Spectroscopy System with Wide Dynamic Range based on New Method of Tracking Ramp and ADCs	Mrs. Chavan Kanchan Vivek, Dr. Vaidya Prakash Pandurang, Dr. (Smt.) Nair Jayalekshmi M			Filed

- BRNS Research Project (Major funded project)

Sr. No.	Project Title	Faculty	Project Status	Industry
1	Development of evaluation methodology for nuclear cross section data using Kalman Filter technique	Dr. (Mrs.) J. M. Nair, Mrs. Sangeetha Prasanna Ram	Started	₹ 17,81,276 /-

- Project Innovations

Sr. No.	Project Title	Faculty	Project Status
1	EOG based Driver Drowsiness detection system	Mrs. Sangeetha Prasanna Ram	Proof of concept established, first prototype of head band and EOG board developed

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- **Industry Projects**

Sr. No.	Name of the Industry	Title of Project	Name of Students	Resource Person	Project Mentor
1	Aditya Jyoth Eye Foundation	Classification and Severity Prediction of Eye Diseases using Fundus Images and Machine Learning	Mayuresh Shelar, Sonali Gaitonde, Mradul Mundra,		Mrs. Sangeetha Prasanna Ram

<b>STUDENT ACHIEVEMENTS</b>
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Sr. No	Name	Awarding Committee	Awarded For	Award Details
1	Ashwin Pillay	International Society of Automation, USA	Good student profile and project based on the L.O.R given by Mr. N. Gopalakrishnan for the Project: 'Drowsiness Detection Wearable using Electrooculography and Machine Learning'	\$2000
2	Mayuresh Shelar	ISA, Maharashtra Section	Work done for the Student Section of ISA-VESIT in the capacity of Coordinator and Executive Officer	Certificate

- **Higher studies details for 2018-19:**

Students got admitted for higher studies in Indian and foreign universities which includes

Name of the Student	University	Field of Specialization
Akshay Patil	University of North Carolina	
T Saisneha		
Oshita Sapte	University of Mishigan	



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• **Industrial Visit**

Industry Visit - Company Name	Industry Visit - Location/Venue	Industry Visit - Start Date	Industry Visit - Duration	Industry Visit - Description
Dahanu Thermal Power Plant	Dahanu	13 <sup>th</sup> April 2019	One Day	

• **Skill Development Activities**

Skill Enhancement Lectures (SEL)

NPTEL

Certification Programs

	Conducted by	Subject	Semester	Resource Person	Topic	Date
1		IPDE	VIII			09/3/19
2	Jayassre R	IDC	VI	Mr. Sachin S. Nevse Engineering Manager, Honeywell, Pune	HART and Fieldbus protocols	21/3/19
3	Nilima Warke	SPPI	VIII	1.Mr. Gopal Bhagat 2.Mr. Ajay Varghese 3.Dr.P.P. Vaidya	1.Overview of gas turbines 2.Instrumentation & control of Gas turbines 3. Fission & Fusion Process in Nuclear Power Plant	28/3/19
4	Kadambari Sharma & Namrata Bonde	EMD	VI	Mr. Shankar Parkar	Motors & Drives	16/4/19